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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,394	02/13/2004	Cory J. Doble	582AC [2681.3171.001]	9010

7590 06/02/2008
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EXAMINER

HWU, DAVIS D

ART UNIT	PAPER NUMBER
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3752

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/779,394	Applicant(s) DOBLE ET AL.	
	Examiner Davis D. Hwu	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-21, 23, 25-32 and 35-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4, 5, 9-11, 13, 14 and 27 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8, 15, 17, 19, 21, 23, 25, 26, 28, 29, 32 and 35-39 is/are rejected.
- 7) ☒ Claim(s) 16, 18, 20, 30 and 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. Applicant's amendment and arguments of April 14, 2008 have been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 1, 2, 7, 8, 32, 35, 36, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reef et al. in view of Fournier et al.

Reef et al. discloses a fuel pump module comprising a reservoir 16, a high pressure fuel pump 14, and a jet pump 10 as recited supplying fuel to the reservoir, the jet pump having a nozzle having an outlet and an inlet in fluid communication with the outlet of the high pressure fuel pump 14. Reef et al. do not disclose at least one restrictor plate as recited. Fournier et al. teach a fuel pump module comprising a reservoir 26, a nozzle 28 supplying fuel to the reservoir, a high pressure fuel pump 14 having an inlet communicating with the reservoir and having an outlet of pressurized fuel, and a restrictor plate 30 between the outlet of the fuel pump and the inlet of the nozzle 28. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Reef et al. by incorporating a restrictor plate between the outlet of the fuel pump and the inlet of the nozzle of the jet pump as taught by the concept of Fournier et al. to control fuel flow. Reef et al. also discloses the reservoir 16 having an inlet and the outlet of the nozzle being generally adjacent the inlet of the reservoir as recited in claim 2. Regarding claim 32, it is obvious to one having ordinary skill in the art that the pressure of the fuel upstream of the restrictor

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plate would have to be greater than the pressure of the fuel between the restrictor plate and the inlet of the nozzle in order to move the fuel.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reef et al. in view of Fournier et al. and further in view of Rich et al.

Rich et al. discloses a fuel pump module comprising a reservoir 20 having an inlet, a high pressure fuel pump 38 having an inlet (from hose 62) communicating with the reservoir and having an outlet of pressurized fuel, a nozzle as recited, and a venturi 60 axially spaced between the nozzle and the inlet of the reservoir as recited. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Reef et al. and Fournier et al. by providing a venturi as has been taught by Rich et al. Having a pair of restrictor plates as recited in claim 25 would have been an obvious design choice since such a modification would have involved a mere duplication of working parts.

5. Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reef et al. in view of Fournier et al. and further in view of Itatsu

Itatsu teaches a fuel transfer device comprising a plurality of restrictor plates 51-53. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Reef et al. and Fournier et al. by incorporating a pair of restrictor plates between the outlet of the fuel pump and the inlet of the nozzle of the jet pump as taught by Itatsu to control fuel flow. Forming a pair restrictor plates would have been obvious since such a modification would have involved a mere deletion of one of the plates of Itatsu.

6. Claims 15, 17, 19, 21, 23, 25, 26, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reef et al. in view of Fournier et al and further in view of Rich et al.

Reef et al. and Fournier et al disclose the instant invention except for a venturi. Rich et al. discloses a fuel pump module comprising a reservoir 20 having an inlet, a high pressure fuel pump 38 having an inlet (from hose 62) communicating with the reservoir and having an outlet of pressurized fuel, a nozzle as recited, and a venturi 60 axially spaced between the nozzle and the inlet of the reservoir as recited. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Reef et al and Fournier et al. by providing a venture as has been taught by Rich et al. Having a pair of restrictor plates as recited in claim 25 would have been an obvious of design choice since such a modification would have involved a mere duplication of working parts.

Allowable Subject Matter

7. Claims 16, 18, 20, 30, and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 4, 5, 9-11, 13, 14, 27, and 37 are allowed.

Response to Arguments

9. Applicant's arguments filed April 14, 2008 have been fully considered but they are not persuasive. When pump 14 is turned off, all of the fuel in the pump will flow back into the reservoir 16 and the jet pump will draw the fuel in under high pressure since

pumps are used to pressurize fluids and in this fuel. Applicant's argument that Reef does not disclose any of the high pressure fuel output of the pump 14 being applied to the jet pump is acknowledged, however, this limitation was not recited in the claim.

Therefore, the prior art reads on the claim language as written. Fournier et al. is used to teach that the use of restrictor plates to control fluid flow is known in the art and therefore does not have to disclose any of the other limitations as argued since Reef already discloses those limitations. Also, an outlet can be considered to be a nozzle in the English language. The argument regarding the Itatsu reference is not persuasive because Itatsu teaches the structural limitations of the instant and whether turbulent flow results from the structure is immaterial.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis D. Hwu whose telephone number is 571-272-4904. The examiner can normally be reached on 8:00-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on 571-272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Davis D Hwu/
Primary Examiner, Art Unit 3752